

UNITED STATES PATENT AND TRADEMARK OFFICE



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/236,995	01/26/1999	PRAMOD MAHAJAN	5718-34	9734	
29122	7590 08/06/2003				
ALSTON & BIRD LLP PIONEER HI-BRED INTERNATIONAL, INC. BANK OF AMERICA PLAZA			EXAMINER		
			KATCHEVES, KONSTANTINA T		
	TYRON STREET, SUITE E, NC 28280-4000	4000	ART UNIT PAPER NUMBER		
	•		1636	27	
			DATE MAILED: 08/06/2003	3	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Advisory Action	09/236,995	MAHAJAN ET AL.					
, , , , , , , , , , , , , , , , , , ,	Examiner	Art Unit					
	Konstantina Katcheves	1636					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
THE REPLY FILED 27 June 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.							
PERIOD FOR REPLY [check either a) or b)]							
a) The period for reply expires 3 months from the mailing date of the final rejection.							
b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
1 A Notice of Appeal was filed on Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.							
2. The proposed amendment(s) will not be entered because:							
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);							
(b) they raise the issue of new matter (see Note below);							
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or							
(d) they present additional claims without canceli NOTE:	ng a corresponding number of f	inally rejected clair	ns.				
3. Applicant's reply has overcome the following reject	tion(s):						
4. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).							
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet</u> .							
6. The affidavit or exhibit will NOT be considered becaused by the Examiner in the final rejection.	ause it is not directed SOLELY	to issues which we	re newly				
7. For purposes of Appeal, the proposed amendments explanation of how the new or amended claims we	(s) a)□ will not be entered or b ould be rejected is provided belo	i⊠ will be entered ow or appended.	and an				
The status of the claim(s) is (or will be) as follows:							
Claim(s) allowed: 1-23.							
Claim(s) objected to:							
Claim(s) rejected: 24-33							
Claim(s) withdrawn from consideration:							
8. The proposed drawing correction filed on is	a)□ approved or b)□ disapp	roved by the Exam	iner.				
9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s)							
10. Other:	, -	_					
·		Konstantina Katche	ves				
Patent and Trademark Office							



As previously discussed, Applicant argues that AJ222589 (Babiyachuk et al.) lacks two amino acids found within the second functional zinc fingers and that Ikejima teaches that poly(ADP-ribose) polymerase (PARP) that lack one of two zinc fingers lack enzymatic activity. First, Applicant should note that the present claims recite an isolated DNA molecule comprising a sequence having at least 90% sequence identity. The sequence of AJ222589 has 95% sequence identity with the present sequence. Second, Applicant is reminded that the classic zinc finger motif of poly-ADP-ribose polymerase comprises Cys-X2-Cys-X28-30-His-X2-Cys. Although AJ222589 fails to contain a necessary component of the zinc finger motif, the motif was known in the art such that one of skill in the art would have motivated to modify the sequence of AJ222589 so that it would now contain two functional motif and provide for a functional PARP. Ikejima et al. establish the functional relevance of the zinc fingers and teach that deletion or mutation of the classic zinc finger domain eliminations the ability of poly ADP ribose polymerase to bind DNA. Therefore, Ikejima implicitly teaches one of skill in the art to provide for two functional zinc finger domains in order to provide a protein with enzymatic activity. Bibyachuk et al., which disclose that the AJ222589 sequence, show a well conserved DNA binding domain comprising two zinc fingers. See page 637. Given the state of the art that the classic structure of a zinc finger domain is well known and the teachings of Ikejima, one of ordinary skill in the art would be sufficiently motivated to modify the sequence claimed by altering the zinc finger domain of AJ222589 to provide for two functional zinc fingers and thus a functional enzyme.

In Applicant's request for reconsideration, Applicant has argued that the fact that the references can be combined does not make appropriate or obvious to do so. For the reasons of record and those above, it is the examiners position that it would have been obvious to combine lkejima and AJ222589. Applicant also has argued that lkejima et al. do not teach or suggest that because human poly(ADP ribose polymerase requires two zinc fingers that one would be motivated to make two functional zinc fingers in maize. Ikejima et al. provides adequate motivate to one of skill in the art to make an additional zinc finger in two sequences having the same cellular function It is well known to those in the art, and the authors of Ikejima et al. that many binding domains comprise more than a single zinc finger i order to substantially enhance DNA binding. Thus, modifying the known zinc finger domain in the poly (ADP-ribose) polymerase of AJ222589 would have been onvious to the ordinary skilled artisan.

REMY YUCEL, PH.D
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600